

Amendments to the Claims:**Listing of Claims:**

1. – 28. (Canceled).

29. (Currently Amended) A method of inducing activation of dendritic cells comprising administering a composition to a mammal comprising at least one polynucleotide and at least one polyoxyethylene-polyoxypropylene block copolymer, wherein more than one plasmid or gene is expressed, and wherein at least one expresses an antigen is expressed and an adjuvant is expressed from the at least one polynucleotide thereby activating at least one expresses a molecules that activates dendritic cells.

30. (Previously presented) The method of claim 29 wherein the adjuvant is a cytokine and the composition comprises at least PLURONIC F127 and L61.

31. (Previously presented) The method of claim 30 wherein the adjuvant is selected from the group consisting essentially of an interleukin, interleukin-12, Flt3 ligand, GM-CSF, and CD40 ligand; and the block copolymer is present in amounts insufficient for gel formation.

32. (Currently Amended) A method of inducing activation of dendritic cells comprising administering a composition to a mammal comprising at least one polynucleotide and at least one polyoxyethylene-polyoxypropylene block copolymer, wherein the composition forms a molecular solution or colloidal dispersion, wherein the at least one polynucleotide comprises a CMV promoter or a NF- κ B-sensitive element, and wherein more than one plasmid or gene is expressed, and wherein at least one expresses an antigen is expressed and at least one expresses a molecule that activates ~~an adjuvant is expressed from the at least one polynucleotide thereby activating~~ dendritic cells.

33. (Previously presented) The method of claim 32 wherein the at least one polyoxyethylene-polyoxypropylene block copolymer comprises PLURONIC F127 and L61.

34. (Currently Amended) A method of increasing an immune response comprising administering a composition comprising at least one polynucleotide and at least one polyoxyethylene-polyoxypropylene block copolymer to a mammal, wherein more than one plasmid or gene is expressed, and wherein at least one expresses an antigen is expressed and an adjuvant is expressed from the at least one polynucleotide thereby inducing an immune response.

35. (Previously presented) The method of claim 34 wherein the composition comprises at least PLURONIC F127 and L61.

36. (Original) The method of claim 34 wherein the composition is administered orally, topically, rectally, vaginally, parenterally, intramuscularly, intradermally, subcutaneously, intraparietally, or intravenously.

37. (Currently Amended) ~~A method of increasing an immune response comprising~~
The method of claim 36 wherein the composition is administered intramuscularly administering
~~a composition comprising at least one polynucleotide and at least one polyoxyethylene-polyoxypropylene block copolymer to a mammal, wherein an antigen is expressed and an adjuvant is expressed from the at least one polynucleotide thereby increasing an immune response.~~

38. (Previously presented) The method of claim 37 wherein the composition comprises at least PLURONIC F127 and L61.

39. (Original) The method of claim 37 wherein said composition is administered to at least one of smooth, skeletal, and cardiac muscles.

40. (Currently Amended) ~~A method of increasing an immune response comprising~~
The method of claim 36 wherein the composition is administered intradermally administering a
~~composition comprising at least one polynucleotide and at least one polyoxyethylene-polyoxypropylene block copolymer to a mammal, wherein an antigen is expressed and an adjuvant is expressed from the at least one polynucleotide thereby increasing an immune response.~~

41. - 69. (Canceled).

70. (Currently Amended) ~~A~~The method of inducing the activation of dendritic cells of claim 29 comprising administering a composition to a mammal comprising at least one polyoxyethylene-polyoxypropylene block copolymer and at least one polynucleotide, wherein the block copolymer is present in amounts insufficient for gel formation and wherein an antigen is expressed and an adjuvant is expressed from the at least one polynucleotide.

71. (Previously presented) The method of claim 70 wherein the composition comprises at least PLURONIC F127 and L61.

72. (Currently Amended) ~~A-The method of inducing activation of dendritic cells of claim 29 comprising administering a composition to a mammal comprising at least one polyoxyethylene-polyoxypropylene block copolymer and at least one polynucleotide wherein the composition forms a molecular solution or colloidal dispersion, and wherein an antigen is expressed and an adjuvant is expressed from the at least one polynucleotide.~~

73. (Original) The method of claim 72 wherein the block copolymers are PLURONIC F127 and L61.

74. (Canceled).

75. (Original) The method of claim 72 wherein the composition is administered orally, topically, rectally, vaginally, parenterally, intramuscularly, intradermally, subcutaneously, intraperitoneally, or intravenously.

76. (Original) The method of claim 72 wherein said composition is administered to at least one of smooth, skeletal, and cardiac muscles.

77. (Currently Amended) ~~A-The method of claim 75 wherein the composition is administered increasing the immune response of a mammal comprising intradermally administering a composition comprising at least one polynucleotide and at least one polyoxyethylene-polyoxypropylene block copolymer, wherein an antigen is expressed and an adjuvant is expressed from the at least one polynucleotide.~~